

DRILLING & PRODUCTION CO.

Tele: 310/328-2405

Fax: 310/328-2407

2323 Border Avenue, Torrance, California 90501 P.O. Box 4120, Torrance, California 90510

September 13, 2004

Jim Nyarady Manger California Air Resources Board

Submitted to the CARB Comment Docket

Re: Comments of August 15, 2024 Workshop on Potential Amendments to the Oil and Gas Methane Regulation to Implement U.S. EPA's Emissions Guidelines.

This is in response to your request for feedback on the potential changes to CARB's Regulations.

We first became aware of the potential impact of the proposed EPA Regulations (now since enacted) at a workshop given by the National Petroleum Council (NPC) in September 2023. We were alarmed at the significant impact that the regulations would have on California production. Heretofore, we had thought that since California has the most stringent regulations in the country, there was little that would be done that would impose regulations that could result in the shut-in of production.

In a letter dated April 22, 2023, the Secretary of Energy directed the National Petroleum Council (NPC) to "undertake a study that defines pathways and prioritizes options for Green House Gas (GHG) emissions reduction". Out of concern for the potential financial and operational impacts on small to mid-sized operators, the NPC held three "Less Capitalized Operator Workshops", one each in Midland, Denver and Pittsburgh. As has often been the case, most West Coast producers were not made aware of the workshops; only one operator is known to have attended!

In subsequent discussions with the San Joaquin Valley Air Pollution Control District (SJVAPCD), we learned that they began studying the potential impact one year ago and were very concerned of the potential impacts that would directly impact heavy oil production. We expect that CARB likewise has been doing a similar analysis. Therefore, it is of great concern that while CARB and the SJVAPCD have been studying the potential impact for the past year, that little information has been provided to the oil and gas industry of the potential impacts if these changes were implemented. It is very difficult to comment on something for which little information has been provided. We find this very troubling.

At the NPC workshops, two items were identified that should be of significant concern to all operators because they could not be economically upgraded to bring under the new regulations:

- Wells producing less than 3 bopd.
- Tank farm and oil processing facilities more than 20 years old.

The impacts discussed were especially alarming when one considers that the new regulations did not take into account circumstances unique to California heavy oil operators:

- Emissions collected cannot be monetized by selling it into a pipeline or generating power to be exported due to existing state restrictions. Thus, solutions that can be used in other parts of the country are not applicable in California
- In some air districts, flaring of stranded gas is being restricted to reduced levels and permits are not being provided for new combustion sources.

The NPC study "Charting The Course: Reducing GHG Emission from the U.S. Natural Gas Supply Chain"

was released in April 2024. The issues raised therein should be considered by CARB, especially in how they relate to California's operations.

Specific comments to the list of potential changes to CARB's regulations are as follows:

- 1) Convert to all zero-emitting pneumatics/process controllers: This should not be a significant problem for most operators since air pneumatics are used instead of gas.
- 2) Ban associated gas venting (no open well casing vents): This would be prohibitively costly to rectify, since casing vents are only allowed to be open if they are not near a collection facility (otherwise, the permit would not be issued). In many cases, no gas is being vented, in which case they should be allowed to remain.
- 3) Lower LDAR leak concentration to 500 ppm: This limit has already been established by the SJVAPCD as part of its leak detection regulations, so the impact would be minimal. Operators routinely repair leaks to levels well below this limit.
- 4) Allow alternative LDAR approaches that achieve equivalent or better emissions reductions: This is a very important area for discussion. Heretofore, focus was on only using EPA Method-21 instruments for quantifying methane emissions. The use of FLIR cameras has been recognized as an authorized detection method that is being used when followed up with Method-21 instruments. Subsequently many similar detection tools have become available at much lesser cost (e.g.: Gazoscan costing \$23,000) than the cost of the FLIR camera (\$120,000). The use of types of instruments needs to be encouraged, thereby enabling operators to better monitor their facilities and keep them in compliance. (The Federal EPA regulations specify the use of FLIR cameras for quarterly inspections, which would be prohibitly expense for smaller operators with little justification).
- 5) Ban or minimize emissions from liquids unloading: This should not be a problem as long as de-minimis sources are allowed, such as was the case in the COGR regulations.
- 6) Limit Emissions from centrifugal compressor dry seals: This should not be a big problem since not in use in California.
- 7) Expand Audio, Visual, Olfactory (AVO) inspections. California COGR and SJVAPCD regulations already specify weekly inspections of this type. However, the recordkeeping envisioned by the Federal EPA adds significant administrative burdens that most smaller operators would not be able to implement (see comments below).
- 8) Require additional recordkeeping and reporting: The records required by the Federal regulations would require real time electronic documentation of inspection data and location in the field. Most smaller operators have not installed systems to do this. Furthermore, the NPC workshops identified the fact the software and IT systems necessary if and when they were available would not be suited for use by most smaller producers; only the largest operators would be able to implement these types of data collection and management systems.
- 9) Require operator compliance plans, notifications of compliance, and well closure plans: This shouldn't be necessary in California since the CARB and local air district regulations already effectively serve as our plans. The duplication of a plan into a company compliance document would be duplicative.
- 10) Revisit separator and tank system emission estimation methods and limits: As stated in the opening comments above, it is estimated that wells producing less than 3 bopd and tank facilities older than 20 years could not be economically upgraded to meet higher standards than those already in place.
- 11) Address U.S. EPA's Super Emitter Program: This is already in place in California.
- 12) Reconsider heavy oil exemption for LDAR. There is more at stake in just the expansion of LDAR to more pipeline components, most of which operators are already doing. The greater impact would be loss of heavy oil exemptions for tanks, separators and produced water systems. Facilities that are not on vapor recovery producing less than 50 bopd of less than 20 API gravity oil could not afford the cost of installing vapor recovery.

One consideration of the Federal EPA methane regulations was that methane captured could be monetized by selling it into a pipeline, generating power or flaring it if it couldn't otherwise be used. However, this has been precluded in California through existing regulations that have prevented the export of power generated onto the grid and the flaring of stranded waste gas. It is strongly recommended that these two aspects of existing State and local air district regulations be re-evaluated as part of any revision to the methane regulations:

- 1) Allowing the export of power generated using stranded waste gas in quantities less than one megawatt.
- 2) Allowing the flaring of stranded waste gas that can't otherwise be economically used. The use of older flare systems should be considered under consideration of their actual field emission profiles.

I will provide copies of the DOE and NPC notices and studies under separate transmittal.

Sincerely,

James C. Hall